

## DOCUMENT RESUME

ED 234 538

EC 160 405

AUTHOR Pappas, Victoria C.  
TITLE Individualized Education Programs: A Naturalistic Study of the Match between Intent and Practice. Executive Summary. Final Report.  
INSTITUTION Indiana Univ., Bloomington. Developmental Training Center.  
SPONS AGENCY Special Education Programs (ED/OSERS), Washington, DC.  
PUB DATE Sep 82  
GRANT G008002237  
NOTE 33p.  
AVAILABLE FROM Victoria C. Pappas, University Developmental Training Center, 2858 E. 10th St., Bloomington, IN 47405 (free).  
PUB TYPE Reports - Research/Technical (143)  
EDRS PRICE MF01/PC02 Plus Postage.  
DESCRIPTORS \*Disabilities; \*Individualized Education Programs; Program Effectiveness; \*Teacher Role

## ABSTRACT

The report summarizes a study of the individualization process for teaching handicapped students. Relationships were examined among three forms of the individual plan: the contractual plan, as written in the individualized education program (IEP) document; the phenomenological plan, the teacher's intent for the program; and the empirical plan, the program as experienced by the child. Data were collected via analyses of IEPs, teacher interviews, and child observations. Results showed congruence across all three components with the teacher incorporating nearly 70% of the contractual plan into stated plans, and the child acting upon approximately 68% of teacher intents and 44% of the objectives in the contractual plan. The contractual plan was organized according to a curricular model while the phenomenological plan was organized according to personal and professional perspectives. Examination of the empirical plan revealed that a good portion of what was intended for the student was being achieved. Implications for incorporating a more comprehensive perspective with the IEP are drawn as well as methodological implications for similar naturalistic investigations.  
(CL)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

This document has been reproduced as  
received from the person or organization  
originating it.  
Minor changes have been made to improve  
reproduction quality.

• Points of view or opinions stated in this docu-  
ment do not necessarily represent official NIE  
position or policy.

Executive Summary

INDIVIDUALIZED EDUCATION PROGRAMS:  
A NATURALISTIC STUDY OF THE MATCH  
BETWEEN INTENT AND PRACTICE

by

Victoria C. Pappas

Final Report

Indiana University Developmental Training Center  
2853 E. 10th Street  
Bloomington, Indiana 47401

September 1982

PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

*Victoria C.*  
*Pappas*

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)."

ED234538

EC160405

## INDIVIDUALIZED EDUCATION PROGRAMS:

### A Naturalistic Study of the Match Between Intent and Practice

#### Summary of the Study

The study of individualization has had a paradoxical history. It is one of those educational phenomena whose value has been espoused by practitioners and theorists alike, but whose test in the research arena has produced less than satisfying results. Attempts to evaluate the impact of individualization have been diffuse, but only a few studies have moved beyond the description of a particular approach to assess the qualitative effects of programs and practices upon children or the degree to which individualization was occurring. Variables of interest in most of the studies have been limited to cognitive and affective outcomes as measured by standardized tests, types of instructional conditions, teacher and student traits, quantity of instructional time, and teacher and student satisfaction.

The individual educational plan (IEP), as a particular case of individualization, has had a similar history. It was an ideology "whose time had come," valued so much by educators, parents, and policy-makers that it became a legislative mandate. Public Law 94-142 guaranteed the right of every child receiving special education services to an individually planned program, documented in an IEP. Along with a flurry of mandated implementation practices, a host of studies was engaged to evaluate the impact of IEPs. Again, these studies focused upon their effects on administration, teacher time and satisfaction, and parental satisfaction and involvement. Only one researcher has inquired, as to whether teachers actually used them after

they were written; there is yet to be an investigation as to whether or not children's education is any different at the classroom level once the IEP is implemented. And now, after the glow of the initial legislation has passed and in a political climate of deregulation, the IEP has lost its glamour, and its purpose as a means towards quality programming is threatened.

The purpose of this study was to investigate the process of individualization, and the IEP as a case in point, from an alternative perspective, seeking information about the relationship of plan to reality so that both educational ideology and public policy might be more adequately informed. A proposition for a triangulated study of individualization was put forth, and the study was conceptualized as the investigation of the relationships among three forms of the individual plan: the contractual plan, or the collaboratively-developed program as expressed in a written document; the phenomenological plan, or the teacher's intent for the program; and the empirical plan, or the program-as-experienced by the child. Utilizing a research design of mixed multiple strategies for data collection and analysis, a model for consideration of the individualization process emerged.

For each component of individualization, different data collection techniques were utilized. For the contractual plan, the task was simply to obtain consent to acquire a copy of the formal IEP as developed for the child-subject earlier in the year, and to question key actors about the process of its development. A copy of the data bank of instructional objectives used by the public school system was also obtained.

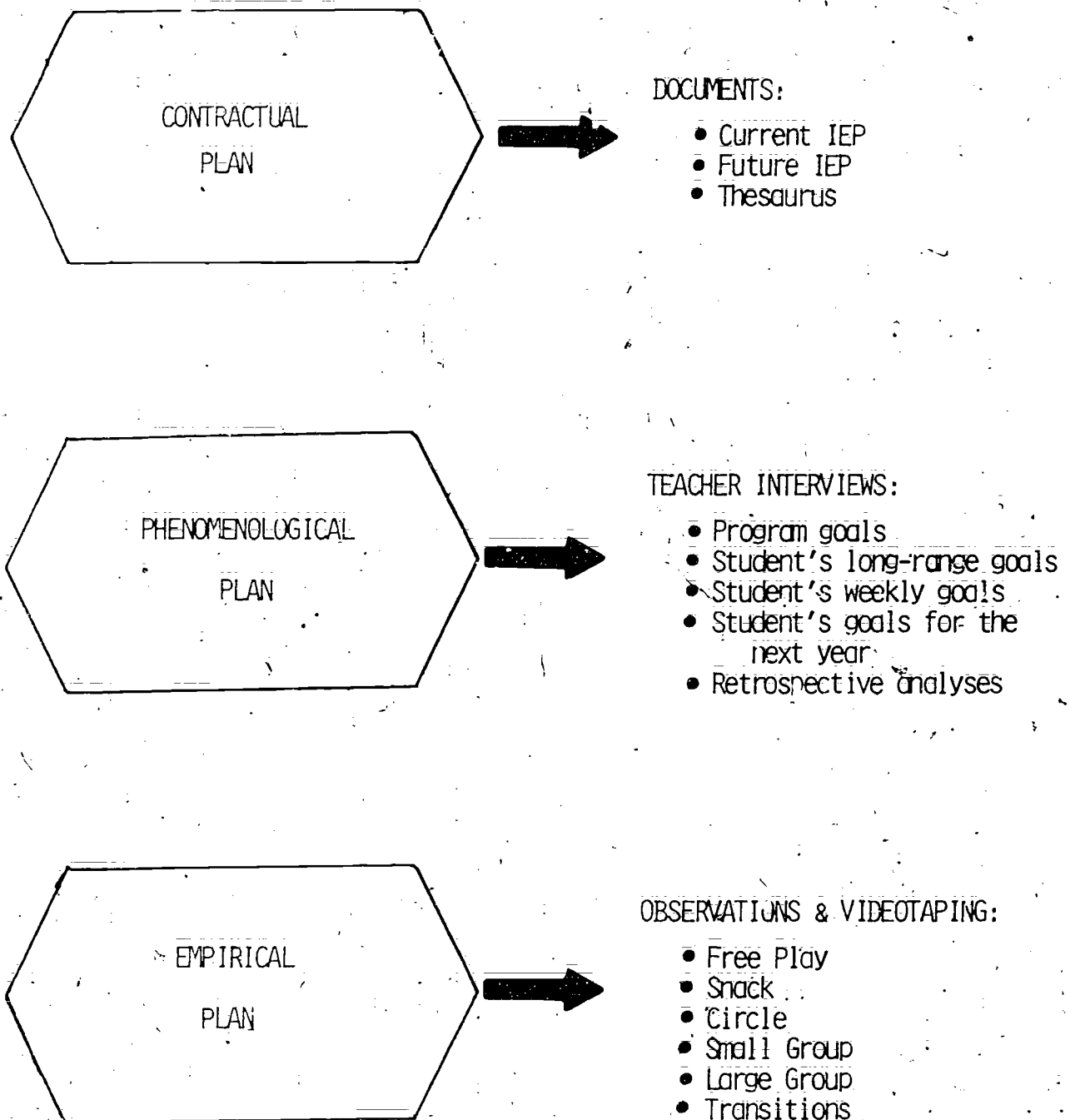


Figure 1. Sources of information for the three components of individualization.

An ethnographic approach was taken to explicate teacher intent. A phenomenological plan emerged from a series of interviews conducted with the teacher-subject, and highlighted the goals and objectives she held for the preschool program, her class, and for the child-subject in particular. These interviews were audiotaped and transcribed. They were also supplemented by field observation in the classroom, both prior to and during the interviews.

In order to obtain information about the empirical plan, a videotape record of the child-subject's natural stream of behavior was taken. This was supplemented by observations of the classroom setting both before and during the taping, as well as by teacher retrospection, where the teacher was asked to comment upon the events depicted on the tape. Teacher retrospections were audiotaped and transcribed. A videoscript was prepared for data analysis, and consisted of the parallel placement of the verbatim videotape transcriptions, the descriptive setting notes, and the teacher retrospection transcriptions.

In summary, the data archives included:

1. a copy of the contractual plan and the data bank of objectives from which it was drawn;
2. audiotapes and transcriptions of teacher interviews;
3. videotapes and transcriptions of the child-subject's natural stream of behavior;
4. audiotapes and transcriptions of teacher retrospection; and
5. field notes of classroom observations and informal interviews and discussions.

Together these constituted a triangulated set of data about the phenomenon called individualization.

Because of the multiple forms of data, multiple strategies of data analysis were also demanded by this study. Their purpose was to synthesize the data so that relationships across the three types of plans would be manifest. A document analysis was conducted on the contractual plan to ascertain patterns of form and content. Content analysis methodology was also utilized to analyze the teacher interviews. Using a team of three analysts, a category system grounded in the identified framework of the teacher's intent was constructed. The categories were arranged to indicate the scope of the teacher's intent as well as its hierarchical arrangement. The depiction of the phenomenological plan which was developed was similar in format to the contractual one, each including numbered goals and objectives held for the child-subject, yet differing with regards to organizing framework, specific content, and detail.

Analysis of the empirical plan was a much more complex task. Here, strategies from ecological research proved most useful in unitizing and categorizing the stream of behavior. The units of agenda and circumstance were defined based on the ecological notion of episodes, and the stream was unitized accordingly by a team of two analysts. Both formative and summative measures of inter-analyst agreement were kept to assure consistency in application of the rules for unitization. These units comprised the empirical plan.

In order to categorize the empirical plan, a matching procedure was developed so that the main question of this study could be explored; i.e., to describe the relationships that existed across the three components of individualization. Each agenda in the empirical plan was matched back to an objective on either the contractual and/or

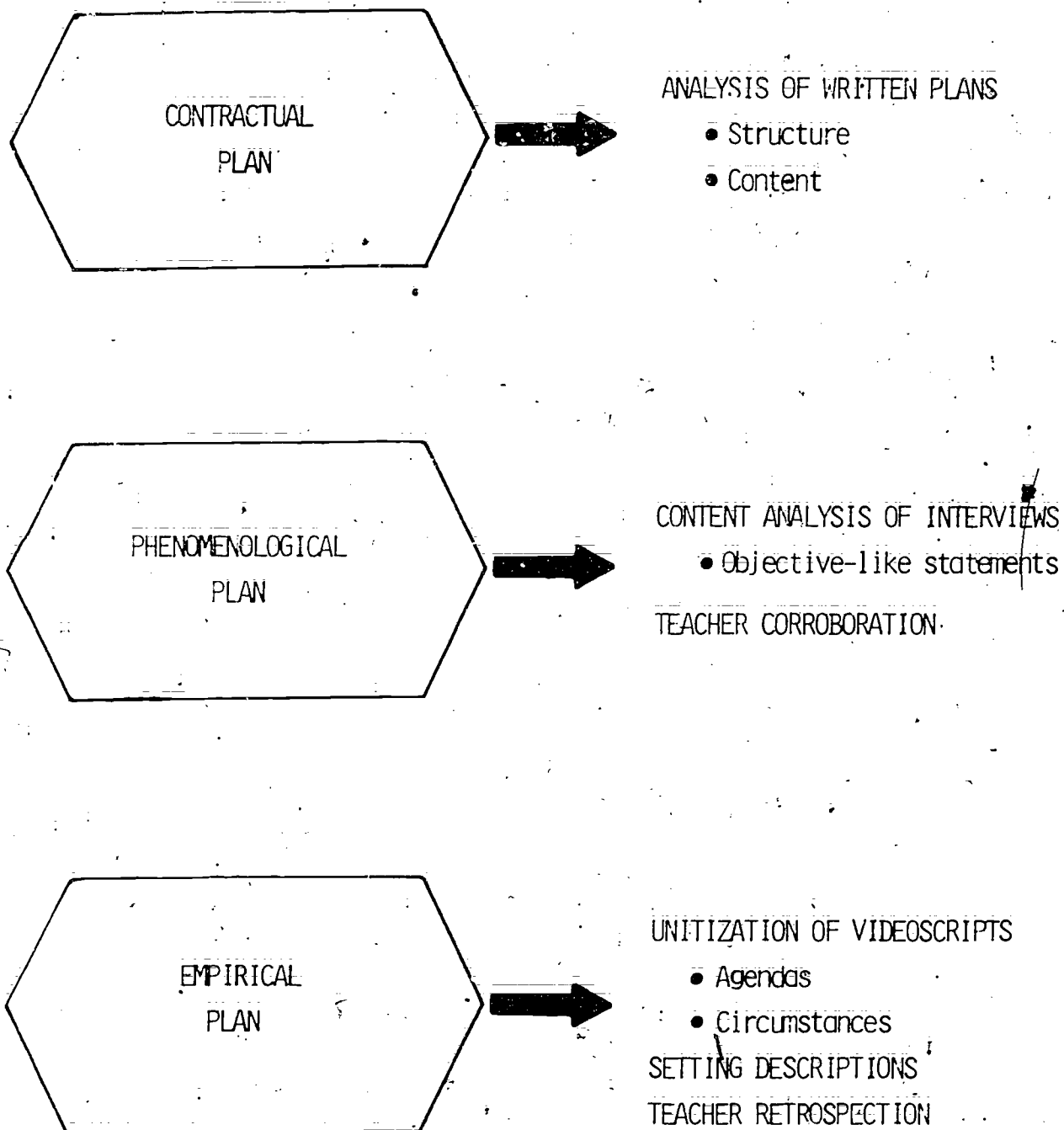


Figure 2. Strategies utilized in the analysis of the three components of individualization.



the phenomenological plans; those agendas which related to neither were coded as non-matches. Again, measures of agreement were tracked, especially for unambiguous items; for the others, the analyst team functioned as an expert panel to reconcile discrepancies in coding. Agendas were also coded for day and setting. Once the matching process was complete, the search for categories and patterns among the 682 agendas was facilitated through the use of a computerized program. By adapting program routines for frequencies, cross-tabulations, and other subset analyses, patterns of interest across the data were explored. Further categorization and referral back to the transcripts and videotapes resulted in the final findings which were reported.

#### Highlights of the Results

The central purpose of this investigation was to ferret out discrepancies and similarities among the various components of the individualization process, and to explicate the relationships among them. There were no hypotheses tested in this study; rather, its purpose was to generate information about variables and hypotheses that might be germane to a fuller understanding of the process of individualization. Hence, the domain of this inquiry was limited to documentation, as opposed to the determination of causality or the search for solutions (see Guba, 1978). Further, while the typicality of the research setting, the subjects, and the planning process was evidenced, the reader should be cautioned about generalizability. Any generalizations made from this study should be considered working hypotheses rather than conclusions (see Cronbach, 1975).

Further, the analyses were limited to a consideration of the matches among the various components of individualization, and to some extent, the effects of context. No attempt was made to delineate findings about the IEP process in general nor to other aspects of the teaching/learning setting available in the data. These data exist, however, in the data archives, and could be retrieved and useful in the investigation of other questions beyond the scope of this study.

The results showed that there was indeed congruence across written plan, teacher intent, and the child's program-as-experienced. The teacher incorporated nearly 70% of the contractual plan into her stated plans; and the child-subject acted upon approximately 68% of teacher intents and 44% of the objectives in the contractual plan. Even the discrepancies were not contradictory; the emergent pattern illustrated how the individualized program grew in scope as one moved from written to teacher plan and through child behavior, and how the additional objectives complemented what went before. It was through the study of the discrepancies created by increasing parameters of the plans that led to some of the more interesting conclusions and implications.

While most of the objectives of the contractual plan were contained in teacher intent, the most critical finding in the comparison between the two was that they were constructed according to two different frames of reference. The objectives of the contractual plan were organized according to a curricular model, whereas the teacher reconfigured those objectives to reflect her personal values and professional perspectives. In the teacher's mind, specific objectives for Michael were nested in three overarching goals: that he be able

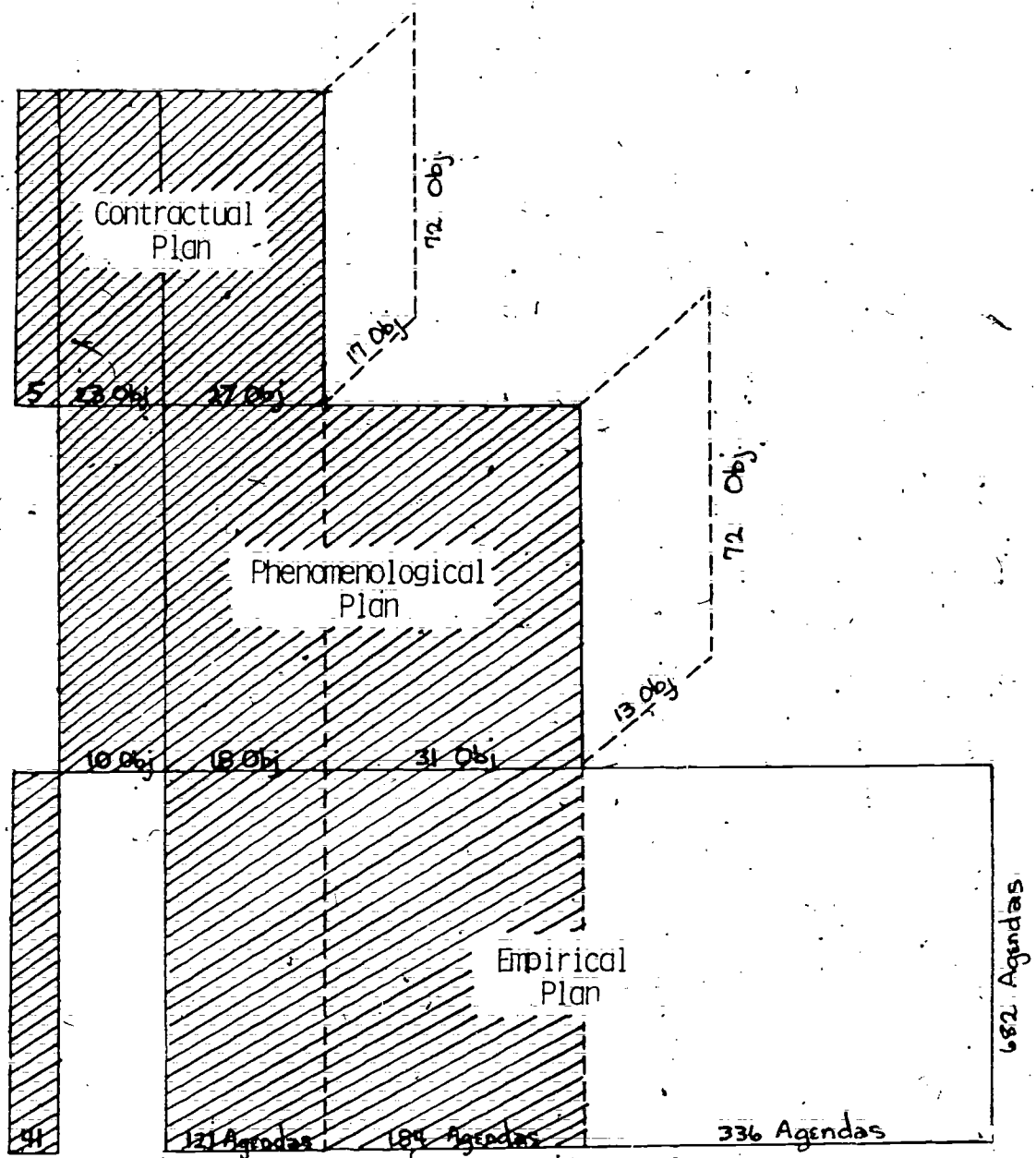


Figure 3. Graphic summary of the matches across various components of individualization.

to function independently, that he succeed in a non-special education kindergarten classroom, and that he become a sensitive member of a social group. The contractual plan, on the other hand, emphasized the development of cognitive/language, self-help, and motor skills. The teacher cast the multitude of objectives, not only Michael's but also those of the other children, into a framework more congruent with what she was about as a person and as a professional practitioner. She related to Michael as an individual, yet she cast his objectives into a context that served not only him, but both the other children and what she valued as well. The classroom curriculum became the teacher's perspective, a finding that substantiates the work of Janesick (1978).

Other findings of interest that emerged as a result of comparing teacher intent to the contractual plan included:

- \* Objectives found in both the written plan and teacher intent often served as means to differing ends; the teacher may have been working on similar skills, but her purpose for learning those skills differed from the contractual plan. Examples of this occurred especially with language and play objectives: for instance, she related Michael's achievement of language skills to social language development, and of play skills to the development of independence. In the contractual plan, language skills were related to correct usage, and play skills were included for the purpose of socialization.
- \* The teacher coped with remembering and handling large numbers of objectives by integrating them into her schema of desired

classroom program goals, which were then achievable during total class activities; for example, Michael's language and self-concept needs could be met in the context of regular activities through his interactions with other children --- specific "lessons" were then not as necessary nor was individual instruction.

- \* Another way the teacher achieved parsimony was to utilize present classroom settings and everyday occurrences to achieve objectives for many of the children, again eliminating the need for specially-planned group or individual lessons; for example, needed self-help skills could be practiced in the cafeteria or getting off the bus.

These findings corroborate the review by Clark and Yinger (1980) that documented the fact that teachers deal with the complexity of the teaching situation by simplifying it in some rational and adaptive way. Here, the teacher's implementation style and management strategies affected how large numbers of objectives were consolidated into a manageable plan. Additionally, this study provided information to support how teachers recast objectives to suit their own purposes, and as to how they identify and monitor aspects of the teaching/learning situation that were most relevant to them, findings also reported by Morine (in Yinger, 1978) and Morine-Dershimer (in Brophy, 1980).

The analysis of the empirical plan was guided by three questions:

- \* What objectives on the contractual plan were being met?
- \* What objectives of the phenomenological plan were being met?

What else were Michael and/or the teacher doing?

Slightly over half of Michael's activities related to objectives found in teacher intent and/or the written plan. Over 50% of the objectives in the contractual plan were matched to Michael's observed behavior, and over 67% to objectives indicated in teacher intent. Thus, a good portion of what was intended for Michael was being achieved. But most importantly, the other half of Michael's behavior extended beyond what had been planned. Overall, this presented a bimodal view of what was occurring in the classroom: teacher plans were getting accomplished, but Michael also was a proactive force in determining the direction and content of his program.

The teacher-subject was quite adept at assuring that her intent was carried out in practice. First of all, the objectives from the contractual plan which were congruent to teacher intent were those most likely to be implemented. Furthermore, the greatest proportion of teacher intent which was implemented was that which contained her own objectives, those which extended beyond the contractual plan. Thus, it appeared that while the teacher worked to accomplish the contractual objectives, primarily preacademic and language in nature, she also moved to accomplish those objectives which were more important to her frame of reference; namely, social development, independence, and learning to do what was expected in school. This was consistent with the goals which she valued most highly for her program, and with findings by Morine (in Yinger, 1978).

Other indications of teacher influence upon the program-as-experienced were found in the analyses of objective-matches by settings. The predominant objectives which matched Michael's agendas

across the various behavior settings were consistent with the teacher's expectations of what was to occur in those settings. In other words, a standing pattern of behavior had been established which shaped Michael's behavior. This was accomplished not only by the teacher's overt actions and verbalizations in establishing and maintaining the pattern, but also through the use of space, the selection and placement of behavior objects, and the structure of time, so that behavior and milieu were synomorphic, in ecological terms. Thus, what was found, not surprisingly, was that socialization and independence skills were a predominant match during Free Play; that feeding and language agendas occurred during Snack; and that preacademic skills were in the majority of agendas during Circle and Small Group. The strength of the behavior settings, however, is related not only to teacher intent, but also to Michael's self-initiated behavior. Even in those situations, in the absence of teacher direction, Michael's behaviors were consonant with the standing patterns of behavior for the various settings. As a result, and to further substantiate this postulate of ecological theory, there were relatively few instances where Michael was reprimanded for inappropriate behaviors. He was reading the "programs" of the settings.

Another interesting set of findings concerned Michael's proactive nature. Just as the teacher was able to carry out her intent, so did Michael carry out a set of agendas that went beyond what was planned for him in either his contractual or phenomenological plans. Over 50% of his behavior was categorized as non-matches. Despite a setting heavily influenced by adult intent, quite structured and with limited opportunities for choice, Michael was able to direct a fairly signifi-

cant amount of his program. Several instances evidenced this: 1) Michael's self-initiation of behaviors which were coded as "seeking out friendships" and "exploring the environment;" 2) the area of pre-tending, not mentioned in any of the plans and supported only at the level of finger plays and songs by the teacher, but more substantively initiated and sustained by Michael without much teacher intervention; 3) the area of skill extensions, particularly where Michael independently demonstrated his interest in and readiness for early reading experiences; and 4) Michael's initiation of non-match agendas during the most structured settings, which also were settings during which the teacher carried out most of her intent. Thus, this case study supported the hypothesis that the curriculum is as much the child's perspective as it is the teacher's, a finding that extends Janesick (1978).

Other findings of note which resulted from the comparison of the empirical plan back to the other two plans included:

- \* Transitions were important settings for learning, particularly, in this case, for objectives in the areas of socialization, independence, and other school readiness behaviors. Behaviors here were both teacher-directed and self-initiated.
- \* Even though the teacher articulated explicit plans for purposes of this study, there were instances where the record illuminated her implicit plans as well. Some were simply extensions of content or level not indicated in the phenomenological plan; others were even contradictory to what she said she intended, as in the instance of her asking higher level



questions than she believed appropriate for Michael's stage of development, and which nonetheless were answered correctly by Michael.

- \* The non-match analysis served another purpose, that of illuminating Michael's classroom style. For instance, it provided an indication of his interest in classroom events and learning activities, of his goal-directedness, his alertness, and his playful teasing nature. They also showed he did not unduly seek attention or affection, nor did he engage in a large number of random or inappropriate behaviors. These would be useful as indirect measures of some of the objectives held for him in the areas of behavior, independence, and school readiness.
- \* A large proportion of Michael's agendas were coded as Watching/Listening. Even though Michael was physically passive, it was evidenced how a great deal of learning took place in these situations. Michael gained knowledge about classroom behavioral expectations, confirmed or re-enforced academic learnings by watching and listening to other children respond in teaching/learning interactions, and saw examples of others modeling sensitive behaviors towards the children with differences. By watching other children, he also gathered ideas he could use for himself, such as building a C.B. radio from blocks or tying a scarf around his head to be an Indian.

Additionally, the analysis of the phenomenological plan provided

evidence to assess researcher effects on the naturally-occurring behaviors of the setting in several ways. First, during teacher retrospection activities, the teacher was able to indicate whether the child-subject or any other children were acting differently as a result of the presence of the equipment or the researcher; she indicated that Michael's behavior on the videotape was typical and that only one other child during one segment was "showing off." Second, although the assessment of degree of teacher desensitization was more indirect, the data did expose some cause to suspect potential researcher effects there. The large number of agendas of Day 1 which matched to the phenomenological plan, coupled with the small number of agendas coded as non-matches, could be interpreted that the teacher was more in control on the first data collection day. This may have been an indication of her attempt to demonstrate best teaching practices and that she was meeting the intent of the written plan, the hypothesis being that while she may have been desensitized to the presence of the researcher in the classroom, but not to the research question, at least until after the first day.

Finally, an analysis of the agendas showed a low frequency of those that had anything to do with the researcher, the television equipment, the smock, or the loose transistor wire. In fact, there were only 21 agendas entitled with any of these conditions, comprising 3% of the 682 total agendas. Most occurred on the first day of data collection. They were distributed as follows:

Wire	1 agenda
Researcher	0 agendas
Smock	13 agendas
Television	7 agendas

As expected, most of these agendas had to do with the smock, which was an indication that it was not entirely comfortable. Being compliant, Michael wore it in the morning, but discarded it after Small Group, and did not wish to put it back on after Gross Motor Time for Large Group. The agendas related to the television equipment were more positive in nature, and were construed as learning activities: for instance, putting the mice on the turn-table, looking at the television screen to see what he looked like in a mask, making faces with a friend to see themselves on the screen, and the like. Except for the pre-data collection interchanges with the researcher in the mornings, there were no agendas where Michael related to the researcher during data collection sessions.

#### Implications for Practice and Further Research

The purpose of this study was to explore various aspects of the individualization in order to generate information about variables, contextual factors, and potential hypotheses that might be germane to practice and future research in this area. The IEP provided an occasion to posit an alternative conceptualization about the process of individual planning and implementation, and to study individualization from a view that was more comprehensive than previous research, one which involved key components of the planning/teaching/learning process.

Originally, Public Law 94-142 was an implementation technique to provide direction to policies set earlier in the courts. The IE included as an alternative accountability system and as a way to document individualization. Early research and practice in the area hav

concentrated on administrative and practical processes and outcomes. Yet it may be as important, if not more so, to advance the study of individualization from its conceptual base.

The current political climate of the 1980s seeks to deregulate much federal legislation, and a regressive economy is forcing reconsideration of federal support of education. One of the most severe tests of an innovation is its capacity to withstand withdrawal of resources and still maintain its conceptual integrity. The IEP provisions of Public Law 94-142 are key items under consideration for revision. The pragmatic response has been to make it simpler, to eliminate many of the regulated components and procedures, and to make it administratively more efficient. On the other hand, a more appropriate response might be the conceptual one --- to search for ways to make it more effective, so that it fosters individualization, its original purpose.

Up until now, most practitioners and researchers have considered the IEP to be merely a written document. This study has shown the reality of a different conceptualization, that of a comprehensive individualized program which acknowledges the interaction of written plan, teacher intent, and child behavior. If the IEP document continues to stand in isolation from teacher and child, it will continue to be perceived as "paperwork" and "time-consuming." As such, it cannot become a vehicle for mediating and integrating the day-to-day experience of teacher and child in the planning/teaching/learning process. How to get that input without violating due process or increasing paperwork remains a critical question. This study poses a counter proposal to the administrative solution: that the legiti-

zation of the subjective perceptions of teachers, children, and parents can provide viable bases for evaluating and revising IEP policies and procedures.

Questions for policy evaluation certainly include the relationship of teacher values and professional perspectives to the planning and implementation process. In this case, the teacher's frame of reference differed from that of the contractual plan, and she clearly had different ends in mind for dealing with the same objectives, but this discrepancy was a complementary one. The teacher implemented a great proportion of the contractual objectives in addition to those of her own. What may be a critical finding is that the child primarily acted upon those which were congruent to both and to others contained only in teacher intent. The influence of the teacher in how a policy becomes implemented is powerful.

This may have greater implications when the discrepancy between teacher frame of reference and formal document is greater. Nearly all the objectives in the contractual plan were devoted to academic and self-help skills, and those complemented one of the teacher's primary purposes, that of preparing Michael for an academic setting. Her classroom was structured for such learning; its activities paralleled what might be expected in a first grade, and the contractual plan was nested within her intent. Had the phenomenological plan reflected the values of a different school of early childhood educators, one which stresses the role of play and social development for instance, would the discrepancy between the two plans have been as complementary? The issue of utilization or lack of it may in part be due to lack of congruency between teacher values and schemes for organizing IEPs.

Further, the preponderance of academic emphases in plan development may result in irresolvable discrepancies between the values of the document and those of the teacher, and hence, lack of utilization of the plan and the tendency to revert to teacher assessments of what is important rather than the contractual agreement.

School policy often interprets the function of the IEP to be one of providing a framework for the instructional program rather than defining the entire program. It is problematic, however, that this occurred in this case. It appeared that teacher intent guided the framework of the instructional program to a far greater degree. These observations bear further investigation before the question of utilization is laid to rest. The wealth of information resting in the teacher's head and her powerful role in implementation of policy provide justification for a more active and central role for the classroom teacher in the plan development process, a situation not reflected in current practice (Pugach, 1982).

Related to this issue are questions of scope and specificity, and the perennial dilemma of attempting to operationalize the differentiation between goals and objectives. Clearly, the contractual plan carried a multitude of specific, measurable objectives. Yet the teacher's intents, stated less "according-to-Hoyle" (or to Mager (1962), as the case may be) seemed workable in so far as providing her with a relevant framework of operating in the classroom. Most importantly, they could be evidenced in the descriptive record of Michael's activities; e.g., his listening and watching agendas, his low rate of random or inappropriate behaviors. These types of objectives made sense to the teacher and their achievement could be

evidenced, without the degree of specification and a priori measures usually recommended for statements of behavioral objectives. Consideration of the use of relevance and evidence in defining criteria for the statement and measurement of objectives may make their use more palatable to teachers.

Additionally, the desired scope of contractual plans may need reconsideration, on the basis of some findings in this study. There may be a point at which the number of objectives for a teacher to process and mediate becomes moot. Also, there is conjecture that while the plan may be developed on an individual basis, individuality is lost in practice as the teacher strives to cope and integrate varying objectives for varying students. The teacher's process may be one of management --- building cohesiveness into an array of demands on her professional behavior by simplification and re-ordering. Thus, the focus on activities, found so often in other studies of teacher planning (Yinger, 1978; and also Clark & Yinger, 1979; Peterson, Marx, & Clark, 1978; Taylor, 1970; and Zahorik, 1975), may simply have been a reflection of the teacher's attempts to simplify and control a demanding environment. Therefore, an activity like Circle could foster for all the children the development of a sense of groupness, while simultaneously facilitating attainment of one child's language skills, another child's understanding of the terms "over" and "under," and still another's ability to attend to a group leader. Along with re-evaluation of degree of specificity may come consideration of optimal numbers of objectives to include on the formal IEP, perhaps leaving more detail to weekly and daily instructional plans.

The legitimization of subjective perceptions also challenges

current innovative practices to make individual planning more efficient, namely the use of objective banks. In the interests of management and administration, many schools have turned to the use of databases of objectives, either in print or in computerized form, for use in development of plans. Marver and David (1978) and Safer et al (1978) concluded that data banks and data management systems were key factors conducive to the utilization of IEPs. While at first glance these objective banks may appear to ease clerical demands, there is the possibility that they may also be hindering the implementation process by de-professionalizing the role of the teacher. The spewing out of objectives devoid of any relation to the professional values and knowledge of the teacher may have resulted in written plans that sit in files, while teachers make use of cues from within themselves as well as from their day-to-day interactions with children to plan and implement individual programs.

In an effort to ease the demands of compliance, educators may have inadvertantly fostered a system that results in lists of preordained objectives that have little perceived utility in the classroom. Further, they may have hindered the dynamic process of IEP development and the inclusion of differential knowledge from teacher, child, and parent. While, it is argued, there is always possibility to include self-developed or group-developed objectives into the bank, the power of the resource may be so coercive that it is easier to resort to it than to make use of the alternative. A parallel example can be found in the use of curriculum guides --- "good" teachers know they are only a resource and a "guide," but once present, they can easily become the point of least resistance. Planning based on professional knowledge



and experience is subordinated to the ease of selecting already thought out solutions. Support for this hypothesis can be found in the future IEP, developed by the teacher who by then "knew both the child and the system." There was almost as little reflection of teacher knowledge in the future plan as when the first IEP was developed by the teacher-subject who at that time "knew the system, but not the child." The future IEP reflected neither the knowledge the teacher had about the child, nor the input of the child regarding his curricular interests.

The role of the teacher in the individualization process must be taken into account. In the implementation of IEP policy at the classroom level, the teacher is clearly the "street level bureaucrat" who Weatherley and Lipsky (1977) contended molds and shapes the intended policy to its ultimate outcomes in practice, due to their considerable latitude in decision-making. The findings of this study illustrated how teachers' values did indeed influence priorities and how teaching decisions were based more upon what a teacher thought ought to be and what she came to know of the child rather than on numerous objectives listed with little relation to a teacher's frame of reference. Recognition of teacher perspectives and perceptions in the planning process may make the IEP policy more relevant and hence, more useful in directing instruction.

Yet the study illustrated the teacher is not the only key actor. A conception of individualization as plan plus teacher plus child was posited and shown to exist. Each form of individualization differed, but complemented the other; while the contractual plan may have begun as the baseline, it was transformed by the teacher, and additionally

influenced by the child. The increasing scope of the different forms of plans and their interactive natures combined to describe a picture of individualization that could influence both practice and research.

The child is proactive, and this not only provides the teacher immediate feedback, but also poses a sensible solution to meeting the spirit of the law in its provision that the child attend planning meetings, when appropriate. Commonly excluded due to age, young children could "participate" in the development of their program, not by physical attendance, but by input gleaned from systematic observations of their behaviors in relation to already-stated goals, as well as those self-initiated agendas that indicate new directions which attract the child.

This knowledge of the child's proactivity may also stimulate more valid use of data banks: to use them to describe current behavior for the purposes of illuminating next steps, as opposed to using them a priori to proscribe behavior. Furthermore, to use data banks in a prescriptive sense may be antithetical to individualization, which is a response to a child's unique behaviors. Objective banks are a composite of the past behavior of other children --- while many of the objectives listed there may be appropriate to a child's current need, there also exists the danger of attempting to fit the child to the objectives at hand. The focus of accountability systems should be one of evaluating the congruence of plans to identified needs, rather than behavior to prespecified plans. In that way, the focus of evaluation is on the degree to which the setting meets the needs of the child rather than whether the child has conformed to external standards.

The fact that there were more agendas identified than matched

objectives may also mitigate against prescription. One interpretation about their existence may be that they were functionally determined in the process of Michael, the teacher, and/or other children "getting together." The teacher may have established some potential occasions for the emergence of learnings by her arrangements of time, activities, and materials, but she did not control the achievement of particular objectives beyond that. Yet they occurred. Perhaps this argues for more consideration of the role of the teacher in individualized programs to facilitate function and role manipulation rather than to predict behavior and outcomes.

The final implication for practice emanates from the discovery of still another type of plan. Despite a wealth of interview data and corroboration of teacher intent on the meaning of the stated objectives, the analysis of the stream of behavior brought to light instances where Michael's agendas went beyond stated teacher intent, and included an intervention by the teacher to elicit that behavior. As a result, the phenomenological component of individualization may need to be expanded to include explicit statements of intent as well as implicit objectives.

Teacher retrospection can also play a role in bringing the implicit and explicit plans together in teacher consciousness. Retrospection may be a mechanism to provide the necessary feedback which could allow teachers to confront discrepancies between plan and action, and to respond to programmatic directions indicated by the child. Brophy (1980) reviewed several studies which showed how teachers had more "reality contact" when lessons went awry or when forced to deal with minor deviations from their plans; at other

times, they worked on "automatic pilot" and were less responsive to students. Data from retrospection may serve a similar purpose in the assessment of teacher effectiveness. A fruitful line of research may be to further examine the relationships of teacher plan and classroom reality, and the changes in the degree of discrepancy wrought by utilization of retrospection. Further, retrospection as a tool for self-evaluation utilizing anecdotal records, observations, and/or professional peers, for the purpose of confronting and reconciling such discrepancies, could be incorporated in professional preparation programs and professional development inservice.

#### Methodological Implications

Naturalistic investigations are demanding ones, as the preceding 235 pages can attest to. While the purpose of this study was primarily a substantive one, its very nature, particularly in the attempts to match question to design, data collection, and analysis, led to the confrontation of several methodological concerns. As a result, there emerged some implications that might be shared with other naturalistic inquirers.

First is the concern for multiple realities. Usually, naturalists seek to triangulate in order to take into account their recognition of the presence of varied perspectives of "truth." This study stands as another example of the contention that triangulation is the essence of naturalistic inquiry. There may be two effects of triangulation. One may be convergence towards a reconciled "truth," the development of a model which synthesizes all perspectives. In this study, the viability of assuming and explicating divergence is presented as an

example of another effect. The differences in these two outcomes and when either is an appropriate model is fruit for further consideration.

To triangulate is to seek information from various actors in the system and about various components of the system in as many different modes of investigation as possible (e.g., document review, observation, interviews). Together, these result in a "thick description" of a phenomenon. In striving towards that goal in this study, another implication became clear --- that of the effects of the medium upon understanding that phenomenon.

McLuhan and Fiore's (1967) insights that media alter the way we see the world have some import to this discussion. If, as they contend, an event is shaped more by the nature of the medium by which it is communicated than by its content, then the impact of the selection of particular media for data collection upon results may be a rich area for investigation. In this study, a fairly wide range of media was utilized, from the human instrument to electronic technology. Eyes recorded events and perused print; ears perceived sounds and communicative utterances. Television and audio tapes captured elements of the same events. These may have predisposed the analysts to think and act in different ways; they may have depicted events and settings in such a way as to evoke unique ratics of sense perceptions.

Some of the trade-offs were known. For instance, videotape was selected because of its low selective attention and its ability, through sight and sound, to capture perhaps the most detailed "slice of life;" selection of other media may have reduced the data or have introduced more observer bias. However, had the human instrument been selected as the primary medium of data collection, it may have added

to the record an organizing scheme of value, a "sense" of the setting, or a more comprehensive view than the restrictions the camera's lens angle allowed. Degree of detail, degree of objectivity, and degree of synthesis may affect what picture of an area of inquiry emerges.

Also in this study, a preliminary attempt was made to use an internal medium, that of teacher retrospection. While intended primarily as a tool for corroboration, it provided a different state through which data flowed, and further addressed issues central to behavioral psychologists (Lieberman, 1979; Radford, 1974) and sociologists (Reinharz, 1979) regarding the validity of introspective data. The investigation of the differential effects of media in yielding data otherwise inaccessible, in bringing to light new facts, and in stimulating the asking of new questions is an intriguing, though perhaps elusive methodological concern.

A third implication for research concerns the issue of representativeness. Examples of techniques to provide thicker descriptions of the case so as to better assess "fit" to other situations were given in this study. The utility of Bronfenbrenner's conception of various levels of systems and Barker's techniques of behavior setting analysis proved to be usable as tools for assessing and describing the typicality of a chosen research site. However, only the surface was scratched in this study, and there remains much more possibility for the development of tools such as these as alternatives to procedures used more appropriately in experimental designs and as ways to avoid the critique of being "soft."

A fourth implication concerns the concept of behavior settings and their standing patterns of behavior. Consonant with Barker (1968),

McLuhan and Fiore (1967) also recognized that "environments are not passive wrappings, but active processes which are invisible . . . ground rules, pervasive structures, and overall patterns elude easy perceptions" (p. 68). In this study, settings were identified and their power to coerce behavior was affirmed. Many of Michael's agendas which were independent of teacher behavior were illustrative of the standing pattern of behavior at work: at Circle Time, Michael went to the carpeted area of the room, sat in the prearranged chairs, and waited for the other children to arrive; at Snack, he conversed spontaneously, while at the same table for Small Group, he raised his hand to respond to teacher-directed questions. His behavior was synomorphic with the settings of the preschool, and he was a child who "read" their programs well.

Furthermore, the function of space, objects and other people to affirm or re-direct the behavior within a setting was evidenced; for instance, the teacher calls from the Snack Table, "It's time for Snack!" to bring children to the table; or a child says, "Hey, Michael!" and engages Michael in a play activity; or books placed on a table attract Michael to leaf through them. An additional analysis of the agendas in this database could result in the identification of patterns regarding the relationship of people, objects, and space to the maintenance of the integrity of a setting. The place of setting "plans" in the model of individualization exists as a potential next research step.

Likewise, the concept of unit of analysis bears further investigation. Two kinds of units have been used in ecological research, but not usually together: the episode, which indicates psychological

intent of the subject (Barker & Wright, 1971), and the environmental force unit (EFU), which indicates external forces brought to bear on the subject (Schoggen, 1963). In this study, the concept of ecological unit was reconstrued in an attempt to integrate the two, through the simultaneous use of agenda and circumstance, in order to come closer to the conceptual base of ecological research. Continued investigation of the relationship of agendas to circumstances might enable the researcher to address certain questions more easily: such as, what forces interrupted Michael's agendas? to what degree were Michael's agendas congruent with, complementary to, or counter to the circumstances of the event? what kinds of forces (adults, children, events, things) impinged upon Michael's behavior, and were there differential results? when a child is reprimanded or deemed deviant, what cues in the setting were ignored and/or what in the agenda seemed to override the expected pattern of behavior? By consideration of the typical units of ecological records in tandem, the linkage between behavior and setting might be further understood.

The uses of a naturalistic paradigm and an arsenal of multiple strategies and media have been helpful to illumine some of the intrinsic properties of a system of individualization and classroom teaching/learning settings. Despite the extent of this presentation of methods and results, only the surface has been scratched. That it may have provided inspiration or insights for further substantive and methodological questions could be its major contribution.



This research was supported by Grant No. G008002237 from the Department of Education, Office of Special Education Programs, Student Research Program. Investigators undertaking such projects under government sponsorship are encouraged to express their professional judgment in the conduct of the project. However, the points of view or opinions stated herein do not necessarily reflect official position or policy of the Department of Education.

© Copyright 1982  
Victoria C. Pappas  
ALL RIGHTS RESERVED